

MORPHATIDES - NOVEL SHAPE AND STRUCTURE LIBRARIES

ABSTRACT OF THE DISCLOSURE

5 This invention provides a method for identifying one or more
complexes from a library of complexes, wherein said complex or
complexes are selected for their ability to perform a preselected
or desired function on a target molecule or by having a pre-
selected structure, each complex being designated a morphatide,
10 said method comprising: (a) preparing a library of morphatides,
comprised of: (i) a scaffolding component selected from the group
consisting of nucleic acid, nucleic acid like molecule or
nucleic acid analog having one or more regions of randomized
sequence; (ii) one or more linker components; and (iii) one or
15 more agent molecules or type of agent molecules, linked to the
scaffolding component by one or more type of linker components;
and (b) screening the library of morphatides prepared in step (a)
by contacting, binding, or associating the morphatides with one
or more suitable target molecules upon which a morphatide
20 performs a preselected or desired function or to which a
morphatide binds or associates through a pre-selected structure
of said morphatide under conditions permitting said morphatide
to perform said preselected or desired function on said target
molecules or permitting said morphatide to bind or associate with
25 said target molecules through the preselected structure; (c)
separating the morphatides performing the preselected or desired
function or binding or associating through the preselected
structure, from the library of morphatides and target molecules;
thereby identifying one or more complexes from a library of
30 complexes, wherein said complex or complexes are selected for
their ability to perform a preselected or desired function on a
target molecule or by having a pre-selected structure.